```
     FILE 'MEDLINE' ENTERED AT 11:00:36 ON 07 AUG 2002
L1         18678 S BETA GALACTOSIDASE OR BETAGAL OR !GAL
L2       2234885 S CELL?
L3        548115 S VIR?
L4        229516 S L2 AND L3
L5          2709 S L4 AND L1
L6         13122 S DETECTION LIMIT?
L7             0 S L5 AND L6
L8            55 S L1 AND L6
L9            55 DUP REM L8 (0 DUPLICATES REMOVED)
L10       451491 S REVIEW?
L11           55 S L9
L12            1 S L9 AND L10
L13          358 S L1 AND L3 AND LIMIT?
L14          290 S L13 AND L2
L15            2 S L10 AND L14
L16          580 S L3 AND L6
L17          190 S L2 AND L16
L18            1 S REPORTER? AND L17
                 E STRONGIN W/AU
L19            1 S E3
L20          134 S HIV AND L6
L21            0 S L10 AND L20
L22          134 DUP REM L20 (0 DUPLICATES REMOVED)
L23            3 S L1 AND L6 AND HIV
L24        33939 S L2 AND HIV
L25           49 S L6 AND L24
L26           49 DUP REM L25 (0 DUPLICATES REMOVED)
L27           49 S L26
L28            0 S REPORTER AND L26
L29           49 S L26
L30            0 S L26 AND L1
L31          884 S HIV AND QUANTIFI?
L32        49984 S CELL CULTURE
L33           20 S L31 AND L32
L34       349901 S LIMIT?
L35            4 S L33 AND L34

=> s reporter? and L2 and HIV and quntifi?
         28187 REPORTER?
        114622 HIV
           101 HIVS
        114628 HIV
                 (HIV OR HIVS)
             1 QUNTIFI?
L36          0 REPORTER? AND L2 AND HIV AND QUNTIFI?

=> s reporter? and L2 and HIV and quantifi?
         28187 REPORTER?
        114622 HIV
           101 HIVS
        114628 HIV
                 (HIV OR HIVS)
         56425 QUANTIFI?
L37         11 REPORTER? AND L2 AND HIV AND QUANTIFI?

=> d L37 ibib abs 1-11
```

(FILE 'HOME' ENTERED AT 17:41:20 ON 07 AUG 2002)

FILE 'MEDLINE' ENTERED AT 17:41:28 ON 07 AUG 2002

L1	60	S	REPORTER? AND DETECTION LIMIT?
L2	451625	S	REVIEW?
L3	1	S	L1 AND L2
L4	4458	S	HIV AND DETECTION?
L5	28209	S	REPORTER?
L6	37	S	L4 AND L5

=>

L6 ANSWER 21 OF 37 MEDLINE

ACCESSION NUMBER: 97104209 MEDLINE
DOCUMENT NUMBER: 97104209 PubMed ID: 8948367
TITLE: **Detection** of **HIV**-1 infection with a green fluorescent protein **reporter** system.
AUTHOR: Dorsky D I; Wells M; Harrington R D
CORPORATE SOURCE: Division of Infectious Diseases, University of Connecticut Health Center, Farmington, USA.
CONTRACT NUMBER: KO8-AI 01320-02 (NIAID)
SOURCE: JOURNAL OF ACQUIRED IMMUNE DEFICIENCY SYNDROMES AND HUMAN RETROVIROLOGY, (1996 Dec 1) 13 (4) 308-13.
Journal code: 9501482. ISSN: 1077-9450.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; AIDS
ENTRY MONTH: 199612
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 19980206
Entered Medline: 19961220

AB Several systems for the **detection** of **HIV**-1 have been described in which **HIV**-1-susceptible cells contain a **reporter** gene (chloramphenicol acetyltransferase, beta-galactosidase, or alkaline phosphatase) under the control of the **HIV**-1 long terminal repeat (LTR). Upon infection by **HIV**-1, the expression of the viral tat product increases transcription from the **HIV**-1 LTR promoter, leading to high-level expression of the **reporter** gene product. Previously described **reporter** systems require processing of the cells by lysis, fixation, or other steps following infection to detect the **reporter** gene product. In the present study, the Aequorea green fluorescent protein S65T variant (GFP-S65T) was used in a **reporter** system for detecting **HIV**-1. HeLa-CD4 cells transfected with the plasmid pRH1, which encodes GFP-S65T under the control of the **HIV**-1 LTR promoter, and either co-transfected with a plasmid encoding the **HIV**-1 tat product or superinfected with **HIV**-1, expressed high levels of GFP-S65T, which was readily detected by fluorescence microscopy and fluorescence-activated cell-sorting analysis. The advantages of this system include its simplicity, sensitivity, and ability to detect and sort live **HIV**-1-infected cells using readily available instruments. The construction of cell lines stably transfected with pRH1 will provide a tool for titering **HIV**-1 and sorting **HIV**-1-infected cells.